







Design and Technology

Subject Overview

Welcome to Planit Design and Technology! These units encourage children to learn through a variety of creative and practical activities - through these activities pupils are equipped with the knowledge, understanding and skills to engage successfully and with increasing independence in the process of designing and making. The units include investigative and evaluative activities where children learn from a range of existing products. Pupils are then encouraged to use the knowledge gained when designing and making their own products. Children develop skills to be able to evaluate their products, considering the views of others and their own design criteria.

Year Group	KS1					
	 <p>Our Fabric Faces</p>	 <p>Dips and Dippers</p>	 <p>Sensational Salads</p>	 <p>Fabric Bunting</p>	 <p>Pirate Paddy's Packed Lunch Problems</p>	 <p>Moving Picture Traditional Tales</p>
Aims These aims are taken directly from the 2014 National Curriculum.	Design					
	design purposeful, functional, appealing products for themselves and other users based on design criteria					
	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
	generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology					
	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
	Make					
	select from and use a wider range of tools and equipment to perform practical tasks					
	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
	select from and use a wider range of materials and components, including construction materials, textile and ingredients, according to their characteristics					
	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
Evaluate						
explore and evaluate a range of existing products						
1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	
evaluate their ideas and products against design criteria						
1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	
Technical Knowledge						
build structures, exploring how they can be made stronger, stiffer and more stable						
1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	
explore and use mechanisms						
1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	

PlanIt Units
 Each subject area has been split into different units for coverage of the 2014 National Curriculum throughout the school year.
 These units contain an overview, lessons packs, an assessment pack, additional resources and corresponding home learning packs.

Lesson Numbers
 These numbers identify which lessons in the unit build upon the National Curriculum aim.

KS1



Our Fabric Faces



Dips and Dippers



Sensational Salads



Fabric Bunting



Pirate Paddy's Packed Lunch Problems



Moving Picture Traditional Tales

Design

design purposeful, functional, appealing products for themselves and other users based on design criteria

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Make

select from and use a wider range of tools and equipment to perform practical tasks

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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select from and use a wider range of materials and components, including construction materials, textile and ingredients, according to their characteristics

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Evaluate

explore and evaluate a range of existing products

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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evaluate their ideas and products against design criteria

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Technical Knowledge

build structures, exploring how they can be made stronger, stiffer and more stable

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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explore and use mechanisms

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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KS1



Our Fabric Faces



Dips and Dippers



Sensational Salads



Fabric Bunting



Pirate Paddy's Packed Lunch Problems



Moving Picture Traditional Tales

Cooking and Nutrition

use the basic principles of a healthy and varied diet to prepare dishes

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand where food comes from

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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LKS2



Juggling Balls



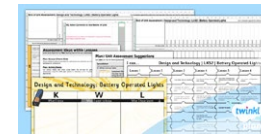
The Great Bread Bake Off



Edible Garden



Let's Go Fly a Kite



Battery Operated Lights



Mechanical Posters

Design

use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Make

select from and use a wider range of tools and equipment to perform practical tasks accurately

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Evaluate

investigate and analyse a range of existing products

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand how key events and individuals in design and technology have helped shape the world

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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LKS2



Juggling Balls



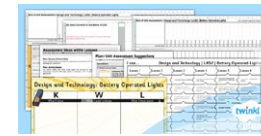
The Great Bread Bake Off



Edible Garden



Let's Go Fly a Kite



Battery Operated Lights



Mechanical Posters

Technical Knowledge

apply their understanding of how to strengthen, stiffen and reinforce more complex structures

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand and use mechanical systems in their products

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand and use electrical systems in their products

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Cooking and Nutrition

understand and apply the principles of a healthy and varied diet

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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UKS2



Felt Phone Cases



Super Seasonal Cooking



Global Food



Automata Animals



Marbulous Structures



Programming Adventures

Design

use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Make

select from and use a wider range of tools and equipment to perform practical tasks accurately

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Evaluate

investigate and analyse a range of existing products

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand how key events and individuals in design and technology have helped shape the world

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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UKS2



Felt Phone Cases



Super Seasonal Cooking



Global Food



Automata Animals



Marbulous Structures



Programming Adventures

Technical Knowledge

apply their understanding of how to strengthen, stiffen and reinforce more complex structures

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand and use mechanical systems in their products

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand and use electrical systems in their products

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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apply their understanding of computing to program, monitor and control their products

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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Cooking and Nutrition

understand and apply the principles of a healthy and varied diet

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
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